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MACHINE FOR COATING RAW OYSTERS

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6 Claims. (Cl. 118—16)

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This invention relates broadly to the preparation of food products and, more particularly, to the covering of such products with an edible coating. While the invention is not to be considered as limited to the covering of any particular food or other product, or to any particular coating material, it is of particular utility in the coating of raw, shucked oysters and in this application it will be so described.

It has been the principal object of my invention, which is achieved in the manner and by the means described in this patent, to provide a method and apparatus for applying an edible adherent coating to a food product such as a raw, shucked oyster.

Other objects and features of novelty of my invention will be made apparent by the following description and the appended claims, reference being made to drawings in which:

Fig. 1 is a generally schematic view of an oyster breading machine according to my invention, and

Fig. 2 is a top plan view of such a machine.

A breading machine constructed and operative in accordance with my invention is disclosed in the drawings forming part of this application and comprises a hopper 2, the open lower end of which is positioned above the lowermost end of the upper reach 4 of an upwardly-inclined endless conveyor belt 6. Finely ground breading or similar material is contained in the hopper 2 and is fed from the lower end thereof to the upper reach 4 of the conveyor belt, by which it is moved upwardly. At the delivery end of the conveyor 6 the breading material falls from the reach 4 into a hopper 8 which has two discharge openings 10, 12 which are positioned above and spaced longitudinally of the upper reach 14 of a second endless conveyor belt 16 which is upwardly-inclined in a direction opposite to that of conveyor belt 6 and which is positioned adjacent and at the side of belt 6. A roller 18, which is carried by a pivoted arm 20, rests on the upper surface of the upper reach 14 of the conveyor belt 16 adjacent the upper end thereof and has a function which will be described hereinafter. The conveyor belt 16 moves in such a direction that the upper reach thereof moves upwardly, carrying with it the breading material delivered from the discharge openings 10, 12 of the hopper 8.

At the delivery end of the conveyor 16, and in position to receive anything delivered therefrom, is a downwardly-inclined screen 20 which may, if desired, be vibrated by any suitable means.

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Food products, including excess breading, traveling along the upper reach of conveyor 16 fall therefrom onto this screen and such products move along and down the screen by gravity, while the excess breading falls through the screen into the open, upper end of the hopper 2 which lies just below the screen. The food products pass along the screen and from it to the upper reach 22 of an endless wire belt conveyor 24 which forms a generally horizontal continuation of the screen 20. Above and below this wire belt are nozzles 26, 28 which are connected through a pump 30 to a reservoir of batter 32, whereby the articles on the wire belt will be sprayed from above and below with the batter.

At the delivery end of the upper reach of the endless wire belt 24 is a fourth endless conveyor belt 40, the inlet end of the upper reach 42 of which lies under the delivery end of the upper reach of the wire conveyor belt 24 so that articles on the upper reach 22 of belt 24 will be delivered therefrom to the upper reach 42 of belt 40. A second hopper 44 for breading material is disposed adjacent the inlet end of the reach 42 of belt 40 and this hopper has two outlet ports 46, 48 which are disposed above and spaced longitudinally of the reach 42 and, respectively, deliver breading material in front of and behind the point at which articles carried by the upper reach 22 of belt 24 fall onto the upper reach 42 of belt 40. A roller 50, carried by pivoted arm 52, rests on the upper surface of the upper reach 42 of conveyor 40. Adjacent the delivery end of the upper reach 42, and below it in a position to receive articles falling therefrom, is a downwardly-inclined screen 56 onto which the breaded articles and excess breading material fall from the upper reach 42. The breaded articles pass down the screen by gravity and are packed or otherwise treated, while the excess breading material falls through the screen into the open upper end of a hopper 60, the discharge opening in the bottom of which is positioned above the lowermost end of the upper reach 62 of an upwardly-inclined conveyor belt 64 which is positioned at the side of and adjacent the endless belt 40. The upper reach 62 of conveyor 64 carries this excess breading material upwardly to the discharge end thereof from which it falls into the hopper 44 for re-delivery through discharge ports 46, 48 to the upper reach 42 of conveyor belt 40.

In the operation of the described machine it will be assumed that raw oysters are to be breaded. Each raw, untreated oyster is placed on the